

WHAT IS CLAIMED IS:

1. An apparatus comprising:
a basic device including a docking interface; and
an accessory device, including a control processor and a power supply unit, that couples to the docking interface of the basic device;
wherein the power supply unit supplies electrical energy to the control processor in response to a control signal received from the basic device and maintains the electrical energy during fluctuations of the control signal.
2. An apparatus as claimed in claim 1, wherein the power supply unit maintains the electrical energy supplied to the control processor in response to a further control signal received from the control processor.
3. An apparatus as claimed in claim 2, wherein the power supply unit includes a power management circuit that receives the control signal from the basic device and the further control signal from the control processor, and a power supply that supplies the electrical energy to the control processor.
4. An apparatus as claimed in claim 3, wherein the power management circuit includes a first switching element that is responsive to the control signal and the further control signal to generate a power activation signal, and a second switching element that is responsive to the power activation signal.
5. An apparatus as claimed in claim 4, wherein the accessory device further includes at least one battery, and the second switching element couples the battery to the power supply in response to the power activation signal.
6. An apparatus as claimed in claim 4, wherein the first switching element comprises a bipolar transistor and the second switching element comprises a field effect transistor.

7. An apparatus as claimed in claim 3, wherein the power supply comprises a switched mode power supply.

8. An apparatus as claimed in claim 1, wherein the basic device comprises a personal digital assistant device.

9. An apparatus as claimed in claim 8, wherein the accessory device comprises a digital camera.

10. An apparatus as claimed in claim 9, wherein the control processor controls the operation of the digital camera to capture image data in response to a control signal received from the basic device.

11. An apparatus as claimed in claim 9, wherein the personal digital assistance includes a display device, and wherein image data captured by the digital camera is displayed on the display device of the personal digital assistant.

12. An apparatus as claimed in claim 1, wherein the power supply unit includes a power management circuit comprising a capacitor and resistor network that receives the control signal from the basic device, and a power supply coupled to the power management circuit, and wherein said capacitor maintains a latches an input of the power supply to a logic level required to maintain the electrical energy when the control signal fluctuates.

13. A digital camera accessory device comprising:
a lens system;
a docking interface;
image processing circuitry that captures image data;
a control processor that controls the operation of the image processing circuitry to perform an image capture operation; and

a power supply unit that supplies electrical energy to the image processing circuitry and the control processor;

wherein the power supply unit supplies electrical energy to the control processor in response to a control signal received from the docking interface and maintains the electrical energy during fluctuations of the control signal.

14. A digital camera as claimed in claim 13, wherein the power supply unit maintains the electrical energy supplied to the control processor in response to a further control signal received from the control processor.

15. A digital camera as claimed in claim 14, wherein the power supply unit includes a power management circuit that receives the control signal and the further control signal and a power supply that supplies the electrical energy to the control processor.

16. A digital camera as claimed in claim 15, wherein the power management circuit includes a first switching element that is responsive to at least one of the control signal and the further control signal to generate a power activation signal, and a second switching element that is responsive to the power activation signal.

17. A digital camera as claimed in claim 16, wherein the digital camera further includes at least one battery, and the second switching element couples the battery to the power supply in response to the power activation signal.

18. A digital camera as claimed in claim 16, wherein the first switching element comprises a bipolar transistor and the second switching element comprises a field effect transistor.

19. A digital camera as claimed in claim 15, wherein the power supply comprises a switched mode power supply.

20. An apparatus as claimed in claim 13, wherein the power supply unit includes a power management circuit comprising a capacitor and resistor network that receives the control signal from the basic device, and a power supply coupled to the power management circuit, and wherein said capacitor latches an input of the power supply to a logic level required to maintain the electrical energy when the control signal fluctuates.

21. A method of managing the power requirements of an accessory device coupled to a basic device comprising:

generating a first control signal with the basic device and supplying the first control signal to the accessory device;

activating a power supply unit to the accessory device in response to the first control signal to supply electrical power to a control processor of the accessory device;

generating a second control signal with the control processor of the accessory device and supplying the second control signal to the power supply unit; and

latching operation of the power supply unit to maintain the supply of electrical power to the control processor regardless of the state of the first control signal.

22. A method as claimed in claim 21, further comprising maintaining the latching of the operation of the power supply unit for a predetermined time period.

23. A method as claimed in claim 22, further comprising discontinuing the latching of the operation of the power supply unit after

24. A method as claimed in claim 23, further comprising performing an accessory operation with the accessory device in response to an activity command signal and resetting the predetermined time period after completion of the accessory operation.